

**ABSTRACT OF THE DISCLOSURE**

Methods for improving processor performance. Specifically, by reducing some of the latency cycles within a host controller, request processing speed can be improved. One technique for improving processing speed involves initiating a deferred reply transaction before the data is available from a memory controller. A second technique involves anticipating the need to transition from a block next request (BNR) state to a bus priority request (BPRI) state, thereby eliminating the need to wait for a request check to determine if the BPRI state must be implemented.